OpenFabrics Alliance

Interoperability Logo Group (OFILG)

February 2019 Logo Report

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Date:	February 27, 2019
Report Revision:	1.0
OFED Version:	OFED-4.17
OS Version:	RHEL 7.5

Enclosed are the results from OFA Logo testing performed on the following device under test (DUT):

Marvell QL41212HLCU

The test suite referenced in this report is available at the UNH-IOL website. Release 2.05-v3 (2017-10-19) was used.

http://www.iol.unh.edu/ofatestplan

The following table highlights the Mandatory test results required for the OpenFabrics Interoperability Logo for the DUT per the Test Plan referenced above and the current OpenFabrics Interoperability Logo Program (OFILP).

Test Procedures	IWG Test Status	Result/Notes
12.1: Ethernet Link Initialization	Mandatory	PASS
13.4: TI uDAPL	Mandatory	PASS
13.5: TI RDMA Basic Interoperability	Mandatory	PASS with Comments
13.6: TI RDMA Stress	Mandatory	PASS
13.7: TI MPI – Open MPI	Mandatory	PASS

Summary of all results follows on the second page of this report.
For specific details regarding issues, please see the corresponding test result.

Testing Completed February 27, 2019

Reviewed & Issued March 19, 2019

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Digitally signed by UNH-IOL
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Result Summary

The Following table summarizes all results from the event pertinent to this iWARP device class.

Test Procedures	IWG Test Status	Result/Notes
11.7 TI iSER	Beta	PASS
12.1: Ethernet Link Initialization	Mandatory	PASS
13.2 TI NFS over RDMA	Beta	N/A
13.4: TI uDAPL	Mandatory	PASS
13.5: TI RDMA Basic Interoperability	Mandatory	PASS with Comments
13.6: TI RDMA Stress	Mandatory	PASS
13.7: TI MPI – Open MPI	Mandatory	PASS

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Report Revision History

- v1.0 Initial working copy

Configuration Files

Description	Attachment
RHEL 7.5 Configuration File	
OFED-4.17 Configuration File	

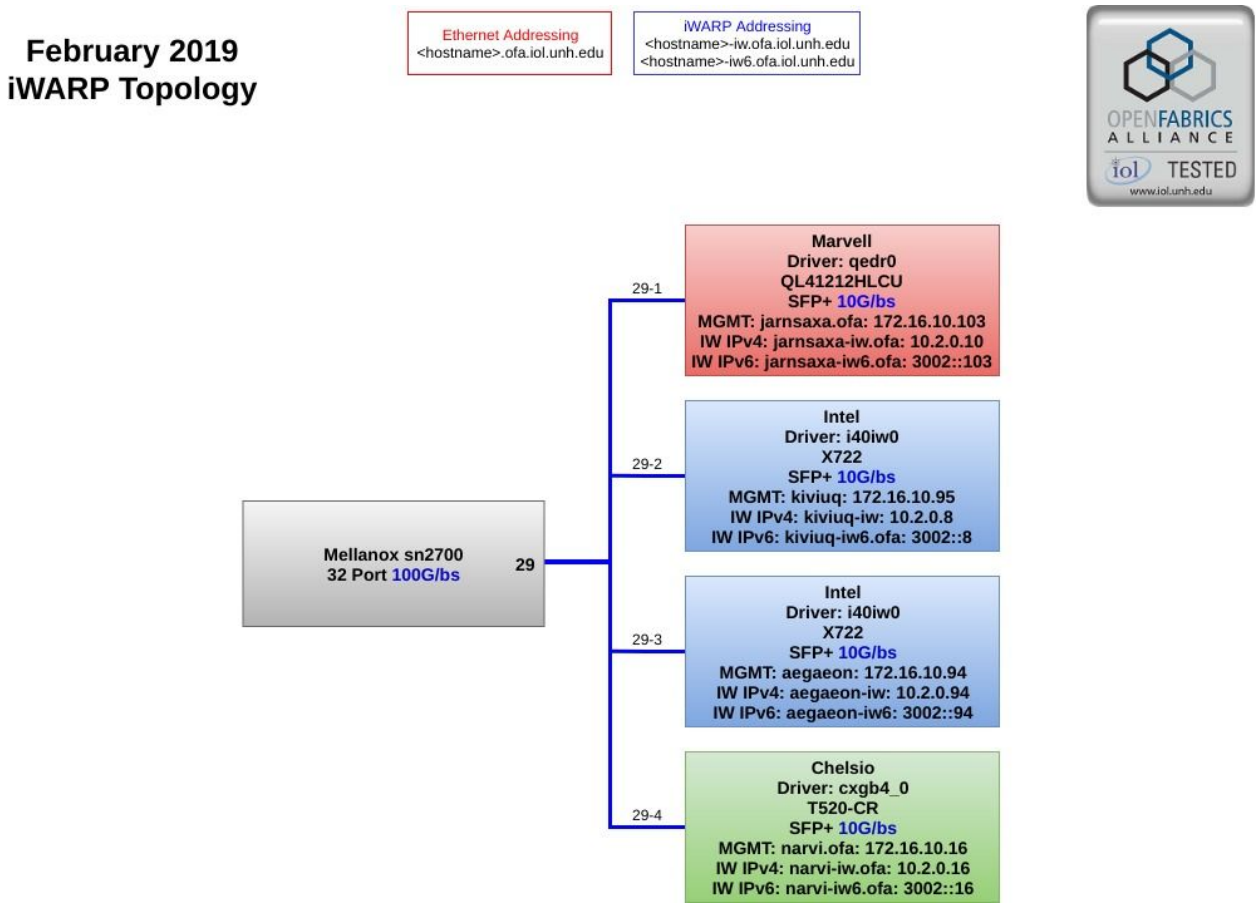
Result Key

The following table contains possible results and their meanings:

Result:	Description:
PASS	The Device Under Test (DUT) was observed to exhibit conformant behavior.
PASS with Comments	The DUT was observed to exhibit conformant behavior however an additional explanation of the situation is included.
FAIL	The DUT was observed to exhibit non-conformant behavior.
Qualified PASS	The DUT was observed to exhibit conformant behavior, with the exception of fault(s) or defect(s) which were previously known.
Warning	The DUT was observed to exhibit behavior that is not recommended.
Informative	Results are for informative purposes only and are not judged on a pass or fail basis.
Refer to Comments	From the observations, a valid pass or fail could not be determined. An additional explanation of the situation is included.
Not Supported	The DUT does not support the technology required to perform this test.
Not Available	Due to testing station limitations or time limitations, the tests could not be performed.
Borderline	The observed values of the specific parameters are valid at one extreme and invalid at the other.
Not Tested	Not tested due to the time constraints of the test period.

DUT and Test Setup Information

The iWARP fabric configuration utilized for all testing is shown below.



DUT #1 Details			
Manufacturer:	Marvell	Firmware Revision:	8.37.2.0
Model:	QL41212HLCU	Hardware Revision:	A2
Speed:	10Gb/s	Located in Host:	jarnsaxa
Additional Comments / Notes:			

Mandatory Tests – IW Device Test Results:

12.1: Ethernet Link Initialization

Test Result	PASS
Result Discussion:	
All devices were shown to link and pass traffic to all other devices in a back-to-back configuration under nominal (unstressed) conditions.	

13.4: TI uDAPL

Test Result	PASS
Discussion:	
All devices were shown to communicate correctly using the Direct Access Programming Library, by use of the Linux dapltest tool.	

13.5: TI RDMA Basic Interoperability

Test Result	PASS with Comments
Discussion:	
Perftest version 4.4-0.5 in OFED-4.17-GA had to be changed to version 4.4-0.3.g7a8e409 in order to pass due to this bug: https://bugs.openfabrics.org/show_bug.cgi?id=2698. All devices were shown to correctly exchange core RDMA operations across a simple network path under nominal (unstressed) conditions. Each HCA acted as both a client and a server for all tests.	

13.6: TI RDMA Stress

	Switch Load	Switch Fan In
Test Result	PASS	PASS
Discussion:		
All switches were seen to properly handle a large load as indicated by the successful completion of control communications between two RNICs while other RNICs in the fabric were used to generate traffic in order to put a high load on the switch.		

13.7: TI MPI – Open MPI

Test Result	PASS
Discussion:	
Intel MPI Benchmarks were performed between all RCAs and were observed to exhibit the successful behavior except for the clean up stage of the run (we have determined this is an issue with the Benchmarks tool itself). We have moved to version 4.0.0 for OpenMPI due to an issue with the older version with the new machines at the UNH-IOL Lab.	